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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/297,382	04/30/1999	VINCENT LETELLIER	Q53893	9694

7590 04/06/2004

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EXAMINER

TRAN, DZUNG D

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 04/06/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/297,382

Applicant(s)

LETELLIER ET AL.

Examiner

Dzung D Tran

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed on 10/06/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-16 and 18-32 is/are pending in the application.
- 4a) Of the above claim(s) 1-8, 14, 15, 21, 22, 25 and 28-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9, 11-13, 16, 18-20, 23, 24, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 9, 11-12, 14, 18-19, 23-24, 26-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 9, 11-12, 14, 18-19, 23-24, 26-27 requires a "wavelength modulation means". However, the specification and drawing do not provide any specific detail to teach a "wavelength modulation means" and how it relates to the invention. Without such detail description, the disclosure does not enable a person of ordinary to made and use the claimed invention.

3. The specification as originally filed does not provide support for the additional submitted drawings (figures 3-5). Therefore, the newly added figures 3-5 are not accepted.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9, 11-13, 16, 18-20, 23, 24, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al. U.S. patent no. 5,737,105 in view of Atlas U.S. patent no. 5,930,024.

In considering claims 9, 13, 16 and 20 Ohta discloses an amplified (figure 3, element 33) and non-bidirectional fiber optic link (figure 3, element 31) including optical loopback (column 5, lines 50-52) of amplifiers to enable COTDR. Ohta differs from claim 9 of the present invention in that Ohta does not specific discloses optical link comprising means for widening the spectrum of the signal in at least one transmission direction, wherein said means for widening the spectrum comprises wavelength modulation means. Atlas discloses the wavelength modulator for broadening the spectrum of the signal (figures 1-6, elements 22, 24, 26, column 2, line 62 to column 3, line 16, col. 3, lines 41-43, 65-67, col. 4, lines 7-10, col. 5, lines 15-19, 56-61). At the time the invention was made, it would have been obvious to an artisan to include the modulator of Atlas in the system of Ohta. One of ordinary skill in the art would have

been motivated to do this the wavelength modulator of Atlas offers a larger optical spectral width, therefore it allows higher optical powers to be injected into the fiber before the onset of stimulated Brillouin scattering (col. 5, lines 56-61).

In considering claims 11, 12, 18, 19, 24 and 27, Atlas further discloses the modulation rate in the range from 0.5 kHz to 10 GHz (claims 11, 18) (column 4, lines 42-64) which is few times greater than the bit rate of the link (claims 12, 19, 24, 27).

In considering claims 23 and 26, Atlas further discloses the modulation rate in the range from 1 kHz to 5 GHz (column 4, lines 42-64).

Response to Arguments

6. Applicant's arguments with respect to claims 9, 11-13, 16, 18-20, 23, 24, 26 and 27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung Tran whose telephone number is (703) 305-0932.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jason Chan, can be reached on (703) 305-4729.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



JASON CHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600